

**SYSTEM AND METHOD FOR PROTECTING MULTIPLEXED
ELEMENTS SHARING A SINGLE ELECTRICAL LINE**

ABSTRACT OF THE INVENTION

5 A system and method are presented for protecting
multiplexed elements sharing a single electrical line. The system
includes a plurality of elements connected to the electrical line, a
switch connecting, to the electrical line, a first element in the plurality
of elements, and a detection sub-system. The detection sub-system
10 evaluates a signal on the electrical line. A detection sub-system
control output supplies control signals in response to comparing a
signal voltage level to a compatibility threshold value. The switch
operates in response to accepting the control signals. The
compatibility threshold value can be selected to equal the maximum
15 voltage compatible with the first element. In some cases, the switch is
a transistor.